# The Greening of Urban Hotels in South Africa: Evidence from Gauteng

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**Abstract** Responsible tourism and climate change mitigation are issues on the South African policy agenda. This paper offers a contribution to the limited existing scholarship dealing with greening of hotels in the developing world. Against a backcloth of international debates on green hotels, the findings are presented from interviews conducted with urban hotels in Gauteng, South Africa. The key argument is that in the absence of any government regulatory measures progress of hotel greening initiatives is limited in scope, mainly driven by a mix of enterprise profit and corporate social responsibility considerations which are undertaken amidst low local consumer interest in green hotels as tourism products.

**Keywords** Responsible tourism · Green hotels · Gauteng · South Africa

#### Introduction

The World Tourism Organisation (2009: 14) contends "climate change will become an increasingly pivotal issue affecting tourism development and management". The impacts of global warming and climate change necessarily must be confronted both by tourism destinations and tourism enterprises (Gössling et al. 2006; Gössling and Schumacher 2010; International Labour Organization 2010; Buckley 2012). Several authors argue developing countries are expected to suffer most from the consequences of climate change and that efforts to reduce greenhouse gas emissions should be at the forefront of planning for sustainable tourism (Gössling et al. 2008; Buckley 2012). The directions of global climate change as well as increased fuel costs are propelling on the policy agenda the "greening" of tourism and the making of carbon neutral destinations. A flagship report recently prepared by the United Nations Environment Programme and the World Tourism Organization highlighted "green

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investment in tourism can contribute to economically viable and robust growth, decent work creation and poverty alleviation; while improving resource efficiency and minimizing environmental degradation" (UNEP 2011: 416).

Although substantial uncertainty exists about the long-term implications of climate change for tourism flows, patterns and destinations, only recently have such impacts been investigated in the African environment (Gössling and Schumacher 2010; Saarinen et al. 2012). The sub-continent of Southern Africa currently is warming up faster than the global average with attendant negative consequences for food security, increased competition for water, and greater risk of certain diseases (Intergovernmental Panel on Climate Change 2007; Bauer and Scholz 2010). For the tourism sector among several negative impacts is biodiversity loss with potential severe consequences for the region's expanding ecotourism industry (Maguire 2011; Republic of South Africa 2011; Reddy 2012). It is recognized therefore environmental management must be an integral component of tourism development, especially for sustainable tourism development in sensitive or protected areas, and more broadly for greening of the tourism travel sector and the tourism accommodation sector (Prayag et al. 2010; Buckley 2012). Nevertheless, it is cautioned the potential for increased costs to consumers from climate change mitigation responses "may lead to comparative price advantage for destinations other than southern Africa" (Gössling et al. 2009: 104).

In South Africa there is rising awareness of the risks that climate change and global warming potentially pose for the country's expanding tourism economy (Camco and TIPS 2010; Maguire 2011; Reddy 2012). The national White Paper on Climate Change identifies tourism as one sector that both contributes to and will be impacted by climate change (Republic of South Africa 2011). A national tourism and climate change action plan is being prepared to ensure South Africa's tourism sector responds effectively to the challenges of climate change. Among key intended outcomes are building resilience and local adaptive capacity, improved understanding of the vulnerabilities of tourism to the physical impacts of climate change, and the development of mitigation responses for reduced tourism-related greenhouse gas emissions (Department of Tourism 2011a). Given South Africa's geographical location away from key tourism markets in Europe, Japan and North America, one recent investigation concluded "concerted action is required in the South African tourism industry to address both regulatory and market related risks from climate change" (Camco and TIPS 2010: 58). Although South Africa is ranked as a competitive destination internationally for nature tourism, the country has a poor track record for reducing greenhouse gas emissions. Accordingly, it was argued innovative local solutions are required "to provide support for low carbon destinations, enhanced travel and accommodation efficiencies and accessible carbon offsets as part of wider efforts to grow the ecotourism and experiential tourism market in South Africa" (Camco and TIPS 2010: iv). Against this backdrop the aim in this article is to examine issues and responses relating to the "greening" of the hotel sector in South Africa, a topic that has so far been overlooked in local tourism research (cf Rogerson and Visser 2004; Visser and Hoogendoorn 2011).

Within the small existing scholarship on hotels in sub-Saharan Africa, issues around the green economy have attracted scant interest. Whilst environmental issues surface as a research focus in broad African tourism scholarship, attention mainly is



centred upon protected rural areas rather than cities (Rogerson and Rogerson 2011). Moreover, despite considerable progress made in urban tourism scholarship in South Africa over the past decade questions surrounding environmental management are little scrutinized (Rogerson and Visser 2007, 2011a, 2011b). Essentially, the research debates around greening of the hotel sector must be located as part of wider considerations about responsible tourism and responsible tourism practices in South Africa which are opened in works by Kohler (2007), Van der Merwe and Wöcke (2007), Frey and George (2008, 2010), and Spenceley (2008). This paper extends this literature by looking specifically at the issue of the "greening" of urban hotels. Two sections of material are presented. First, a review of international scholarship on debates on green hotels is undertaken. The analysis confirms the minimal attention which so far has been devoted to green hotels in literature relating to hotels in the global South. Second, the results are given of research investigating the greening of hotels in Gauteng, South Africa's economic heartland and major geographical concentration of hotel development (Rogerson 2012). The key argument is that in the absence of government regulatory measures, progress of greening initiatives in Gauteng hotels is fragmented and limited in scope, mainly driven by a mix of enterprise profit and corporate social responsibility considerations which are pursued amidst low local consumer interest in green hotels as tourism products.

## Greening the Hotel Sector—International Research and Debates

The interrelationships between climate change and the hospitality sector are garnering an expanding international scholarship (Bergin-Seers and Mair 2009; Walmsley 2011; Myung et al. 2012). Although the hospitality sector does not grossly pollute the environment as badly as other industries and nor does it consume vast amounts of non-renewable resources, this does not mean that the industry has no impact on global resource consumption (Chan and Wong 2006; World Tourism Organisation 2009). Timothy and Teye (2009: 81) draw attention to the fact that "the lodging sector has played an important role in ecological deterioration" albeit less so than the impacts of the travel sector, especially of air transport or cruise ships. One estimate put forward by the World Tourism Organisation (2009) is that in 2005 the accommodation sector accounted for 21 % of the carbon dioxide emissions from tourism. For Rahman et al (2012: 720) the "lodging industry is the most environmentally harmful hospitality sector". Arguably, as Sue et al. (2012) point out, hotels represent "one of the tourism businesses most vulnerable to climate change because of their fixed assets". Wu and Teng (2011: 7579) assert the hospitality industry can no longer ignore its environmental responsibilities.

Nelson (2010) identifies the accommodation sector as a segment of the tourism industry in which improvements can be effected especially in the type and quantity of energy that it uses. From the experience of Europe, however, despite its importance, the question of environmental stewardship is not always a major priority for the hotel sector (Bohdanowicz 2006). Nevertheless, it is recognized as part of the broader movement toward sustainable growth and development, resorts, hotels, motels, lodges, bed and breakfasts and other segments of the accommodation sector "have begun to take action in doing their part to sustain the physical environment" (Timothy



and Teye 2009: 81). Key initiatives relate to improvements in energy efficiency, water conservation, and waste management. In addition, going green can involve a greater commitment to local economic sourcing of goods and services (Timothy and Teye 2009). In particular, of significance can be the reduction of "food miles" through sourcing a higher proportion of food from local producers (including organic produce) and more broadly a strengthening of the sectoral linkages between tourism and agriculture (Pillay and Rogerson 2012). Beyond the greening of supply chains, other relevant initiatives can encompass biodiversity protection, enhance advocacy initiatives, green education or training for employees and customers, improvements of air quality, use of ecological food and reduction of noise pollution (Mensah 2006; Timothy and Teye 2009; Hsieh and Jeon 2010; Yang 2010; Coolen and Bokhoree 2011).

It is suggested the emergence of the so-termed "green hotels" "has become one of the most important innovations in the tourism sector" (Wu and Teng 2011: 7579). According to the website definition of the Green Hotels Association (2012) green hotels are "environmentally-friendly properties whose managers are eager to institute programs that save water, save energy and reduce solid waste – while saving money – to help PROTECT OUR ONE AND ONLY EARTH!" Arguably, "green hotels may be distinguished from ordinary hotels in that they aim to use products and services that minimize the consumption of water and energy, and reduce the output of solid waste, in order to protect the environment from the further depletion of its natural resources" (Wu and Teng 2011: 7579). Pizam (2009) debates whether the proliferation of green hotels is a temporary fashion, a marketing ploy, or a new growing trend that will ultimately become a permanent feature of the hotel sector. It is considered that many unscrupulous hoteliers engage in the practice of "green washing" for marketing purposes and institute simple practices such as changing bed linen less frequently or eliminate disposable toiletry in guest rooms. Indeed, some hotels "Go green as a marketing ploy without really being green" (Rahman et al. 2012: 721). Nevertheless, whilst the green hotel can be a marketing ploy to attract customers sympathetic to environmental causes, it is asserted a "growing number of hoteliers are sincerely instituting programs that save water and energy, reduce solid waste, use resources economically, protect the planets ecosystem, and provide products and services that do no harm to human health" (Pizam 2009: 1).

Issues relating to the greening of the accommodation sector have become an expanding focus in tourism and hospitality research since the late 1990s (Myung et al. 2012). Research concerning the greening of hotels incorporates various strands of work. The management of environmental practices in hotels is of central concern, including performance assessment and benchmarking (Kirk 1995; Timothy and Teye 2009; Chen and Hsieh 2011; Chan 2012). Walmsley (2011) shows different hotels and hotel chains are reacting with varying responses to the challenges of climate change in terms of both mitigation and adaptation. Chain-affiliated hotels are shown to be stronger adopters of greening practices than are independent or small hotels (Rahman et al. 2012: 725). The environmental knowledge and awareness of hotel managers and attitudes towards environmental practices is a question that has attracted attention in Europe (Kirk 1998; Bohdanowicz 2006). Scanlon (2007: 711) considers that the education of hotel owners and operators represents one key to



understanding the benefits of implementing environmental management practices. In the experience of small hospitality firms Tzschentke et al. (2008) point to the importance of unpacking the environmental consciousness of individual business owners in order to understand their decision making. Sampaio et al. (2012) stress small tourism firms are distinguished by informal approaches to management and that the type of environmental practices adopted reflect the formality of management within businesses as well as the owner-managers understanding of the environment and their expectations.

Considerable debate surrounds the reasons for the greening of the hotel accommodation sector. Conventionally, the planning and development of environmental management practices in hotels was governed by financial considerations with any environment-friendly action possible being taken whenever budgetary conditions permitted (Kirk 1995; Coolen and Bokhoree 2011). Several factors can influence the decisions by modern hotels to go green. The three major drivers are competitiveness, legitimation and ecological responsibility (Rahman et al. 2012). Environmental strategies can be a source of competitive advantage for hotels (Bader 2005; Claver-Cortés et al. 2007; Hsieh and Jeon 2010). As has been pointed out: "Going green can improve long-term profitability not only by lowering expenses but also by transferring these savings to customers" (Rahman et al. 2012: 721). Essentially, sustainability has become a business issue for especially larger hotel chains which are more likely than independent hotels to undertake green practices (see Bohdanowicz et al. 2011; Rahman et al. 2012). Indeed, increasingly, it is considered that the strategic "question is not whether to operate in a sustainable manner, but to determine how to make certain that sustainable practices also make business sense. In conducting a green business one needs to examine how to make money and to develop new and different ways to save or create money. If a particular process or concept doesn't save money or make money then there's not much point in pursuing it" (Cornell University 2010: 5). Beyond competitiveness, legitimation can drive greening initiatives in circumstances where governments have introduced regulatory requirements for hotel compliance.

Finally, the driver of ecological responsibility suggests businesses choose to go green because it is simply "the right thing to do" (Pizam 2009: 1). It is disclosed that among small and budget hotels the growth of green business practices often is the outcome of the ethical concerns of owner-managers about the natural environment (Choe et al. 2011). In the USA smaller, independent hotels often were engaged in community-oriented green practices and use local and/or organic products (Nicholls and Kang 2012a). In large chains, however, going green is inseparable from improving brand image and marketing to clients. Many leading international hotel chains such as Hilton, Marriott and Accor have enacted strategic policy statements and actions around environmental management. For example, Accor has a Sustainable Development department and Marriott an executive level Green Council (Hsieh and Jeon 2010). The existence of written corporate environmental statements can be associated with the adoption of green practices, albeit not as extensively as might be expected (Nicholls and Kang 2012a, 2012b). Research in North America suggests the existence of spatial variations in the innovation of green practices with the Midwest states viewed as the strongest cluster for greening hotel enterprises (Rahman et al. 2012: 726).



Certain research reports that consumers appreciate and reward firms that demonstrate environmental and social responsibility and correspondingly were willing to pay "premium costs for green services" (Choe et al. 2011). Other work, however, contests the issue of consumer willingness to pay and suggests that "the 'talk' is still louder than actions to some degree" (Choe et al. 2011). It has been argued favourable or unfavourable consumer attitudes to visiting green hotels mainly depend on the positive or negative views of family, friends or colleagues (Wu and Teng 2011: 7584). This finding suggests that the managers or marketers of green hotels "should actively seek ways to improve the perceptions of green hotels of targeted groups" (Wu and Teng 2011:7584). Much work has been undertaken around consumer behavior, preferences and perceptions about tourism businesses going green, including use of the theory of planned behavior (Tsai and Tsai 2008; Kim and Han 2010; James et al. 2011; Millar and Baloglu 2011). Mixed results are disclosed with issues of service quality, customer satisfaction and frequency of past behavior seen as significant whereas factors such as gender, age and household income did not significantly affect consumer eco-friendly intentions (Han et al. 2009; Han and Kim 2010; Kim and Han 2010; Han et al. 2011). The critical issue emerges that whilst consumers might seek to patronize hotels using green practices and endure minor inconveniences such as re-used towels and recycled products, green practices must not compromise service quality standards (Manaktola and Jauhari 2007; Kim and Han 2010).

One significant influence on hotel preference from North American findings is that of the importance of certification schemes in relation to environmental management (Millar and Baloglu 2011). Several criteria-based certification programmes have been initiated in relation to greening. The US Green Building Council has established a standard for green building certification with the so-termed LEED (Leadership in Energy and Environmental Design) system, which specifies standards for developing high performance sustainable buildings, including hotel properties (Butler 2008; Timothy and Teye 2009). At the international level Green Globe 21, Ecotel and GreenLeaf are non-governmental organisations "that grant 'green' certification of several levels to those who meet their stated conditions" (Pizam 2009: 1). According to Butler (2008: 234) whereas "building a green hotel used to cost a premium, current studies show that the cost of building to LEED standards is not greater than conventional approaches". Nevertheless, it is admitted that hotel developers still face specific hurdles in developing and operating green properties, such as finding vendors, contractors, engineers, housekeepers, landscapers and managers that understand the new systems, products and procedures (Butler 2008: 240).

Overall, according to Nicholls and Kang (2012b) the largest amount of research on greening of accommodation has occurred in Europe. Over the past 15 years, however, green hotels have gained increased attention especially in more mature tourism markets of USA and Canada where specific rating systems have been produced to monitor green hotels. More recently, the geographical horizon of scholarly investigations has widened with a stream of contributions around the greening of hotels in North America (Millar and Baloglu 2011; Nicholls and Kang 2012a, 2012b; Rahman et al. 2012), Australasia (Becken 2012) and Asia (Le et al. 2006; Kasim 2007; Manaktola and Jauhari 2007; Kasim 2009; Su et al. 2012). Of significance is the limited research and writings which relate to greening of hotels in the developing world. Kasim (2009: 709) observes that empirical work on the acceptance of



environmental impacts and responsibilities by hotels in developing countries "is still relatively rare". Recent relevant studies include investigations on the environmental management practices of hotels in Ghana (Mensah 2006), Egypt (Ball and Taleb 2011; El Dief and Font 2012), Vietnam (Le et al. 2006), and Malaysia (Kasim 2007, 2009) and on consumer attitudes towards greening of the Indian lodging industry (Manaktola and Jauhari 2007). This South African research on the greening of hotels adds to a minimal scholarship relating to hotels in developing countries.

## Greening of South African Hotels: Evidence from Urban Gauteng

The promotion of responsible tourism has been anchored as the cornerstone of South African tourism policy since 1996. Among its defining characteristics as indicated in the White Paper on the Development and Promotion of Tourism in South Africa is "tourism that promotes responsibility to the environment through its sustainable use" (Republic of South Africa 1996: 4). The fostering of responsible tourism has been a consistent thread of national government policy since the 1994 democratic transition (Spenceley 2008). Beginning in 1996 the Department of Environmental Affairs and Tourism has produced a succession of policy documents which reiterate this commitment to responsible tourism, most importantly the issuance of a set of guidelines in 2003 for the making of responsible tourism (Spenceley 2008). This policy commitment was re-stated in 2009 when a separate National Department of Tourism was established. This new NDT included among its mandates the imperative for forging "conditions for responsible tourism growth". In the 2011 National Tourism Sector Strategy (NTSS), considerable weight is attached to policy issues of encouraging the "greening" of South Africa's national tourism economy in order to maintain international competitiveness (Department of Tourism 2011b). It is acknowledged by the NTSS that "a low-carbon value chain for the tourism sector will be an increasingly important driver of competitiveness" (Department of Tourism 2011b: 5).

Arguably, the development of a low carbon tourism chain necessitates local tourism businesses, including urban-based tourism enterprises, address questions of responsible travel and of "greening". The importance of encouraging responsible tourism practices in urban areas is underlined by the fact that South Africa's tourism space economy is highly polarized with national tourism spend concentrated geographically in the country's major urban centres (Rogerson and Visser 2004). One recent investigation confirmed that the country's ten large urban municipalities account for 55 % of national tourism spend. Of the five most important centres for estimated tourism expenditure, three (Johannesburg, Pretoria and Ekurhuleni) are situated in Gauteng province, the economic heartland of South Africa (Wilson 2011).

The Gauteng urban region contains the largest cluster of hotel accommodation in South Africa (Rogerson 2012). The region's hotel stock includes a wide spectrum of hotel accommodation across different market segments, such as luxury full service hotels, limited service hotels, all suite accommodation and boutique hotels (Rogerson 2010, 2011; Rogerson and Kotze 2011). Over the period 1990–2010, Gauteng experienced a phase of considerable hotel expansion with the upgrading of the stock of existing hotel accommodation and the opening of an array of new hotel developments which occurred in the wake of new post-1994 tourism growth in South Africa



accompanying the country's re-insertion into the international tourism economy. As Johannesburg was the major focus for South Africa's hosting of the 2010 FIFA World Soccer Cup the city experienced a surge of new hotel developments and upgrading of existing hotel establishments especially in the period from 2002 to 2010 (Rogerson 2012). The Gauteng hotel sector is oriented mainly towards the market requirements of both domestic and international business tourists as well as international leisure travelers using the OR Tambo International airport as a gateway to visits to South Africa's nature tourism attractions. In addition, the Gauteng tourism economy is increasingly geared to accommodate rising numbers of regional tourists arriving from sub-Saharan Africa. Although a large segment of these African visitors are low spend cross-border traders or shoppers, as South Africa's major commercial centre and location for corporate headquarters Johannesburg is a critical hub for African business tourists and MICE tourism more generally.

Methodologically, this study applies qualitative research, the need for which was identified in one earlier investigation of responsible tourism practices in the South African hotel industry (Van der Merwe and Wöcke 2007: 10). In researching questions relating to the greening of hotel accommodation in Gauteng, this exploratory study uses material which draws from semi-structured interviews with key stakeholders involved in the greening of hotel properties and supplemented by documentary sources, including government and industry material such as corporate environmental statements. Two sets of interviews were pursued. First, in mapping the regulatory environment relating to green buildings and the greening of hotels, key interviews were undertaken with: (1) members of the Green Building Council of South Africa, the national body that regulates the development of green construction or sustainable buildings; (2) the most important certification agency, Heritage Environmental Management, the South African partner of the Green Globe brand, and (3) Fair Trade in Tourism South Africa, a non-governmental organization which awards trademark certification to tourism businesses that adhere to Fair Trade practices. Together this group of interviews permits the greening experience of these South African hotels to be situated within the international context of certification and regulatory debates.

The actual progress of greening and of issues relating to the greening of hotels in urban Gauteng was tracked through a second set of 10 semi-structured interviews which were undertaken with representatives of leading local and international brand hotels operating in Johannesburg and Pretoria as well as at Ekurhuleni, the location of OR Tambo International Airport. Figure 1 shows the location of the hotels which participated in the study. Importantly, the research captured interviews with representatives of South Africa's three most important hotel chains, namely Southern Sun (recently rebranded as Tsogo Sun), Protea and City Lodge, as well as the international Sheraton group and a number of independent hotels. All selected hotels were in the medium to high quality range of accommodation and classed as three to five star quality hotel establishments. The key markets for this group of establishments are domestic and international business tourists as well as international leisure tourists. Interviewees at hotels were mainly general managers, chief engineers or maintenance managers. At one Sandton hotel an additional interview was undertaken with the head chef about innovative procurement practices relating to the hotel's local sourcing of food. Finally, the research reported here incorporates also the core findings of a



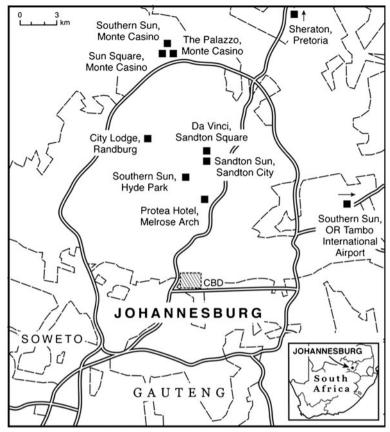


Fig. 1 The location of surveyed hotels in Gauteng, South Africa

separate investigation of consumer attitudes towards greening and green hotels in South Africa, involving a survey of 110 Johannesburg respondents (Sims 2011).

Our findings are organized in terms of two sub-sections of discussion. First, attention centres upon understanding the regulatory environment in South Africa concerning green building and the certification of green hotel properties. The second section turns to interpret the progress and issues which are raised relating to greening initiatives pursued by urban hotels using the case of Gauteng.

## Green Buildings and Green Hotels: Regulation and Certification

At the outset, it must be understood that despite the national policy commitment in South Africa towards responsible tourism the regulatory environment is weak with the result that enterprise commitments to participate in responsible tourism practices are voluntary (Van der Merwe and Wöcke 2007; Spenceley 2008). As shown in other research on responsible tourism practice in South Africa the key drivers for environmental initiatives initially emerged out of corporate social responsibility initiatives. More recently, the drivers for the adoption of responsible practices have linked to the development of pro-poor tourism project initiatives and critically to increased



recognition of the business case for adopting responsible tourism practices set against a backcloth of growing green consumerism in certain international tourism source markets

In terms of our particular focus on the greening of hotels, a number of important developments have occurred which follow international standards relating to green buildings and the certification of "green practices" in tourism businesses. In a parallel to international building certification initiatives, the Green Building Council of South Africa (GBCSA) was established in 2007. As compared to developments taking place in the USA, Australia, Japan or Europe, the movement towards green property development in South Africa is in its infancy. Nevertheless, the GBCSA has established the Green Star SA environmental rating system for buildings, which represents a comprehensive rating system for evaluating their environmental design and performance (Mulvan 2011). The evaluation is based on a number of criteria including energy and water efficiency, indoor environmental quality and resource conservation. The Green Star SA environmental rating system is based upon the Australian Green Star rating system which has been adopted and customized for the local environment by the GBCSA under licence from the Green Building Council of Australia. Although the South African green property certification system has built from the Australian model, it has also incorporated elements from the British Building Research Establishment Environmental Assessment Method (BREEAM) and the US Leadership in Energy and Environmental Design (LEED) system (Mulvan 2011). Of significance internationally is that the LEED Volume Programme for Operations and Maintenance provides a streamlined approach for organizations pursuing certification of at least 25 existing building properties. The programme focuses on the application of consistent policies and management practices as well as centralized data management for green buildings and is viewed as compatible for a range of property developments, including commercial, office, retail, government, higher education and the hospitality sector.

In adapting these systems to South Africa specific environmental measurement criteria relevant to the local context have been established. Importantly, however, the interviews disclosed that whilst aspects of the US LEED programme can be applied to hotel developments, by 2011 this programme had not been approved for the local hotel sector. As a result, there is currently no official programme which exists in South Africa to regulate green hotel property developments. Instead, the responsibility for verification of the environmental practices of tourism businesses has devolved to enterprises which offer independent third party recognition, including to hotel enterprises. The most notable initiative in South Africa relates to the environmental management company, Heritage, which was established in 2002. This enterprise launched the Heritage Environmental Rating Programme for the tourism and hospitality sector in southern Africa. The certification programme was established to provide operators of all types of tourism businesses with an effective environmental management system designed to reduce and limit their environmental footprint. Heritage incorporates the standards of seven international programmes in a three tiered approach to sustainability certification. The programme is based largely on the Swan Eco-Label in Scandinavia, Green Globe Agenda 21, the International Hotels Environmental Initiative and International Organisation of Standards ISO 9000, 14000 and 18000. From May 2009 the Heritage Environmental Management



Programme became the preferred partner of the international Green Globe Brand (Heritage 2012). For African tourism enterprises, including hotels, it is stated that the "Green Globe seal provides independent recognition of sustainability efforts by businesses across the tourism and travel sector, while environmental and cultural levels as well as corporate social responsibilities are benchmarked against the highest worldwide principles. Its object is to introduce and strengthen sustainability and social practices at all levels of management" (Heritage 2012).

Overall, without government regulation specifying detailed requirements, enterprise compliance regarding "green tourism" is voluntary in the South African context. Mulvan (2011) asserts that "At present there is no official South African 'green' rating system which can be applied to the hotel establishment industry in this country". Further, as Seif (2011) argues "Government would like hotels to seek third party certification but will not make it mandatory". Quality assurance for sustainable tourism and environmental management practices in the South African hotel sector is thus to be achieved by voluntary certification through the activities of third party enterprises. The most significant certification programme is that of Green Globe which is used by a number of South African hotels, including those in the Gauteng research.

## Greening Initiatives in Gauteng Hotels

In light of the voluntary nature of "greening", it is perhaps not surprising that the findings from the 10 hotel interviews reveal a "spotty" or fragmented picture concerning the progress of greening in Gauteng hotels. The hotel interviews disclosed a consensus that a green hotel involved the implementation of measures for reduced energy and water consumption and minimization of the hotel's environmental footprint. Beyond these issues, awareness of the need for eco-friendly service, optimization of waste management and use of "green" suppliers were other issues highlighted by hotel managers.

It is significant to note that each hotel interviewed gave varying responses, revealing that various hotels and managers have their own agendas and ideas about the greening of South African hotels. An important finding was that managers representing the franchise of the same local hotel chain (Southern Sun) often provided different responses. This underlines that whilst a hotel group may have a certain level of corporate "green" standards that they wish to attain, the individual managers running the chain hotels have different means, agendas, or ideas about achieving these standards. Accordingly, in South Africa a hotel's response to be "greener" is driven by the vision of top management and by individual hotel managers. This finding was supported by Seif (2011) who stated that "in South Africa, managers of hotels have the 'say' and influence regarding 'green' initiatives". Another factor that differentiated the hotel responses was the age of hotel as particular hotel designs resulted in limits to the types and extent of green initiatives that could be implemented. Market segment of hotel was also a differentiating factor with one interviewee acknowledging that whilst green initiatives were important, it was not a priority as compared to such issues as the comfort and safety and security of their guests.

All ten interviewed establishments had implemented a range of "green" initiatives, albeit differing in form and extent. Of the ten interviewed establishments, eight had



already achieved Green Globe/Heritage certification. Cost considerations were viewed as vital for driving much of the greening initiatives that were recorded, in particular those concerning energy efficiency. Indeed, hotel interviewees made clear the pre-eminence of cost considerations and that if such initiatives coincided with "green" initiatives then that was considered a bonus. Interviewees confirmed that "there are no green legislative requirements for hotels in South Africa" and pressures for initiating green initiatives came either from high level management and corporate environmental statements or increasingly from international guests who consider themselves as green travelers and opt to stay in green or environmentally aware hotel establishments.

The results reveal a trend which shows each hotel does what it sees as necessary and significant within its individual capabilities and without compromising service standards to become more "green". The most common initiatives related to the introduction of new technologies or systems which aimed at energy reduction with corresponding long-term cost savings. All hotels where possible have changed from use of high electrical demand appliances, such as stoves and ovens, to gas powered appliances. Another widespread innovation was heat pumps to reduce the energy costs of boilers. Renewable energy use in the form of solar panels is so far limited but has been successfully introduced in at least one Sandton hotel resulting in a considerable reduction in energy needs. Several hotels used smart technologies to monitor all energy inputs, outputs and consumption. The introduction of Light-Emitting Diode (LED) lighting was common and given considerable impetus by a rebate scheme which was offered by Eskom, South Africa's main energy utility company. Additional measures related to energy savings linked to changing lighting involved the use of down lighters, the introduction of compact fluorescents in staff only areas, and smart technology motion sensor lighting in guest rooms. Energy savings were further augmented by enacting towel re-use programmes in nearly all hotels by giving guests the option of having linen washed every 2 days as opposed to the convention of every day washing. One exception in this respect was the hotel at OR Tambo International Airport, where most guests stayed only one night. The outsourcing of hotel laundry work to independent service operators using state of the art large machines that can do bulk loads was a further energy reducing measure.

Among water conservation measures the most notable was the installation of water saving shower heads and where possible the use of grey water. Waste management systems were reordered in all establishments with multiple sorting, separating and recycling stations introduced in back of house areas in order to allow more efficient and effective waste management. In addition, final waste collection points were redesigned to make them more effective for sorting of hotel waste. A minority of hotels have introduced programmes also for the recycling of building material, such as metals and of electronic waste, such as old or broken lights. One creative initiative involves use of ink cartridges for recycling with proceeds used for planting trees as a carbon offset measure. Finally, of growing popularity is the innovation of on site worm farms to reduce organic waste and produce "worm tea" which is diluted with water, providing a fertilizer for hotel gardens.

Green procurement was pursued by most of the interviewed hotel establishments. One respondent stated: "A green hotel must try and do business with other 'green' accredited clients and where possible buy environmentally friendly products and



materials to be used in the hotel". An increased trend was towards the use of green cleaning products and preference for local suppliers of organic produce. In several cases, however, hotel managers offered the caveat that green procurement was implemented only if quality standards were not compromised. The advance of green procurement was limited often by attitudes of procurement managers especially concerning long-established relationships with certain suppliers. One aspect of green procurement was enhanced local sourcing of food supplies. At one Sandton hotel the executive chef had initiated a programme for the preferred sourcing of certain supplies from a group of 11 small privately owned farms within a 100-km radius (one hour drive) of the hotel. This "farm to table" initiative includes sourcing of supplies for trout, nuts, a range of vegetables and microherbs. It represents a partnership between the city hotel and these preferred suppliers for procuring products which are considered as both sustainable and environmentally friendly.

In common with international practice, awareness programmes were introduced for the education of hotel staff about energy reduction, water conservation and the wider significance of greening practices. Typically, one hotel manager observed that "Hotels need to implement awareness programmes for staff in order to get the message across regarding their role and impact in the environment". Among the common initiatives of Gauteng hotels to increase sustainability by employees are the Switch-Off Something (SOS) campaigns, educational notices, and participation at "green" training workshops. The consensus among hotel interviewees was that whilst education and training had been broadly successful, certain groups of staff failed to accept the need for sustainable hotel operations. From one interview, it was recorded as follows: "Getting certain staff members such as cleaning staff to realize the need and importance of conserving energy and resources is difficult". Indeed, issues with the training and educational workshops for cleaning staff were of wide concern as managers struggled to get their lowly remunerated cleaning staff to understand the long-term ramifications of going "green".

Several other factors were disclosed as limiting the impact or extent of hotel greening initiatives. Age and design of existing hotel premises was a factor noted in the survey as managers of older hotel properties often battled to enact green initiatives given the constraints of existing hotel design, function, location or size. One significant limitation is low domestic consumer awareness and demand for green hotels in South Africa. Low demand among domestic South African travelers was confirmed by a consumer survey undertaken of 110 Johannesburg residents which was adapted from the international annual green traveler study. The study findings reveal only 5 % of South African respondents consider themselves as "extremely ecoconscious" (Sims 2011: 23). Hotel choice was primarily determined by quality and cost considerations, location and hotel reputation. Less than one quarter of the survey respondents indicated that their decision-making would be impacted by a hotel's environmental programme or certification status. The minimal "green" culture among domestic hotel customers was reiterated in the ten hotel interviews. It was considered that the business case for implementation of green initiatives exists only in terms of marketing to long haul international tourists from Europe or North America. Other limitations upon the extent of greening adopted by South African hotels relate to the impact of a recessionary economic climate which resulted in hotels being unable to spend freely upon the adoption of greening initiatives.



#### Conclusion

This article represents a modest contribution to the limited existing research on environmental management practices and the greening of hotels in the global South. With its long standing national policy commitment to encouraging responsible tourism practices, South Africa offers fertile territory for such investigations. The results of this examination of urban hotels in Gauteng confirm earlier findings about the "low level of support for responsible tourism initiatives in the hotel industry" (Van der Merwe and Wöcke 2007: 4). In common with the international experience, the sample of urban hotels in Gauteng mainly adopted greening practices that improved profits or sought enhanced public relations. Notwithstanding the recognition by national government of the significance of greening for building a more competitive low carbon tourism economy, the current voluntary nature of tourism businesses undertaking green practices results in a reduced take-up of greening. Overall, this analysis reflects the argument of Buckley (2012: 534) that whilst tourism enterprises often lead new approaches for improved sustainability in urban hotels "mainstreaming needs government legislation".

The conclusions of this exploratory study need to be interrogated in wider South African research on greening of property developments. In particular, further large scale investigations are merited on the greening of the accommodation sector. Among critical issues for scrutiny are the adoption of and effectiveness of eco-certification, the differentiated responses between chain and independent hotels, and variations in greening of different forms of hotel (e.g. luxury versus budget hotels). Finally, building upon international research there is a need also to examine the potential for geographical variations in greening associated with hotel operations which are dominated by long haul international tourists as opposed to domestic or regional visitors.

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